

**ST. CROIX COUNTY
CODE OF ORDINANCES
LAND USE AND
DEVELOPMENT**

**SUBCHAPTER IV
SECTION 17.40
FLOODPLAIN OVERLAY DISTRICT**

EFFECTIVE SEPTEMBER 30, 2005

AMENDED 3-16-09

AMENDED 6-7-16

**COMMUNITY DEVELOPMENT DEPARTMENT
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ST. CROIX COUNTY CODE OF ORDINANCES

LAND USE AND DEVELOPMENT

SUBCHAPTER IV, SECTION 17.40

ST. CROIX COUNTY FLOODPLAIN OVERLAY DISTRICT

A. GENERAL PROVISIONS

1. TITLE

- a. This subchapter shall be cited as the "St. Croix County Floodplain Overlay District" and is herein after referred to as the Floodplain District.

2. AUTHORITY

- a. The provisions of the Floodplain District are authorized by Wisconsin Statutes §§59.69, 59.692, 59.694 and 87.30 and Wisconsin Administrative Code Chapter NR116 (NR 116).
- b. Any mandatory amendments or repeals or recreations to the statutes pertaining to the subject matter of this ordinance are incorporated into this ordinance as of the effective date of amendment, repeal or recreation.

3. EFFECTIVE DATE

- a. This ordinance shall be effective on September 30, 2005. Ordinance No. 711/(2005).

4. FINDINGS OF FACT

- a. The St. Croix County Board of Supervisors finds that the uncontrolled use of the floodplains adversely affects the public health, safety, convenience, general welfare, land values and tax base of St. Croix County.
- b. In addition, substantial public expenditures may be required for the protection, rescue and relief of persons and property in areas subject to periodic flooding.
- c. Uncontrolled filling and construction have been determined to be the major causes of adverse effects.
- d. The effects of a single fill or other single project upon flood heights, velocities, or floodplain storage areas may be relatively insignificant, but the combined effects of a number of such projects may drastically increase the potential for injury or damage from flooding. Without a thorough analysis of proposed development it is not possible to adequately assess impacts.

5. PURPOSE

- a. The purpose of this ordinance is to promote and protect public health, environment, safety and general welfare and to further the maintenance of safe and healthful conditions for the people and communities within the County.
- b. Protect life, health and property.
- c. Minimize expenditures of public funds for flood control projects.
- d. Minimize development in a floodplain which would obstruct flood flows and decrease the storage capacity of the floodplain.

- e. Minimize rescue and relief efforts undertaken at the expense of the taxpayers.
- f. Minimize business interruptions and other economic disruptions.
- g. Minimize damage to public facilities.
- h. Broadening the property tax base of the County by enhancing property values.
- i. Discourage the victimization of unwary home and land buyers.
- j. Prevent conflicts between neighbors.
- k. Minimize the occurrence of future flood blight areas in the floodplain.
- l. Prevent increases in flood heights that could increase flood damage and result in conflicts between property owners.
- m. Discourage development in a floodplain if there is any practicable alternative to locate the activity, use or structure outside of the floodplain.

6. APPLICABILITY

- a. The Floodplain District is an overlay zoning district and applies in addition to other zoning regulations found in Chapter 17 to all unincorporated areas within St. Croix County meeting the definition of a floodplain.
 - 1) If any provision of this subchapter conflicts with any provision of Chapter 17, the more restrictive provision shall apply.
- b. The Floodplain District regulates all areas that would be covered by the base flood or regional flood.
 - 1) Base flood elevations (BFE) are derived from the flood profiles in the Flood Insurance Study (FIS). Areas covered by the base flood are identified as A Zones on the Flood Insurance Rate Map (FIRM).
 - 2) Regional flood elevations (RFE) may be derived from other studies per §17.40 E.3.

7. COMPLIANCE

- a. Any development or use within the areas regulated by this ordinance shall be in compliance with the terms of this ordinance, and other applicable local, state, and federal regulations.
- b. All St. Croix County government agencies are required to comply with this ordinance and obtain all necessary permits. State agencies are required to comply if Wisconsin Statutes §13.48(13) applies. The construction, reconstruction, maintenance and repair of state highways and bridges by the Wisconsin Department of Transportation is exempt when Wisconsin Statutes §30.2022 applies.

8. WARNING AND DISCLAIMER

- a. The flood protection standards in this ordinance are based on engineering experience and scientific research. Larger floods may occur or the flood height may be increased by man-made or natural causes.
- b. This ordinance does not imply or guarantee that non-floodplain areas or permitted floodplain uses will be free from flooding and flood damages.
- c. Nor does this ordinance create liability on the part of, or a cause of action against, St. Croix County or any officer or employee thereof for any flood damage that may result from reliance on this ordinance.

B. OFFICIAL MAPS

1. OFFICIAL MAPS BASED ON FLOOD INSURANCE STUDY

- a. Flood Insurance Rate Maps (FIRM) dated March 16, 2009, with corresponding profiles that are based on the Flood Insurance Study (FIS) number: 55109CV000A, dated March 16, 2009:

MAP PANELS AFFECTED:

55109C0009E, 55109C0017E, 55109C0019E, 55109C0030E,
 55109C0036E, 55109C0037E, 55109C0038E, 55109C0039E, 55109C0041E, 55109C0043E,
 55109C0044E, 55109C0055E, 55109C0060E, 55109C0061E, 55109C0062E, 55109C0063E,
 55109C0064E, 55109C0066E, 55109C0067E, 55109C0068E, 55109C0069E, 55109C0080E,
 55109C0090E, 55109C0093E, 55109C0095E, 55109C0110E, 55109C0115E, 55109C0140E,
 55109C0145E, 55109C0157E, 55109C0158E, 55109C0159E, 55109C0166E, 55109C0167E,
 55109C0169E, 55109C0176E, 55109C0181E, 55109C0182E, 55109C0184E, 55109C0187E,
 55109C0188E, 55109C0189E, 55109C0192E, 55109C0193E, 55109C0194E, 55109C0202E,
 55109C0203E, 55109C0204E, 55109C0206E, 55109C0207E, 55109C0210E, 55109C0211E,
 55109C0215E, 55109C0220E, 55109C0226E, 55109C0227E, 55109C0230E, 55109C0235E,
 55109C0240E, 55109C0245E, 55109C0255E, 55109C0260E, 55109C0265E, 55109C0270E,
 55109C0280E, 55109C0285E, 55109C0290E, 55109C0291E, 55109C0292E, 55109C0295E,
 55109C0309E, 55109C0317E, 55109C0319E, 55109C0326E, 55109C0328E, 55109C0336E,
 55109C0345E, 55109C0355E, 55109C0360E, 55109C0363E, 55109C0364E, 55109C0365E,
 55109C0366E, 55109C0367E, 55109C0368E, 55109C0369E, 55109C0380E, 55109C0385E,
 55109C0390E, 55109C0395E, 55109C0403E, 55109C0405E, 55109C0408E, 55109C0410E,
 55109C0415E, 55109C0420E, 55109C0430E, 55109C0435E, 55109C0440E, 55109C0457E,
 55109C0481E, 55109C0482E, 55109C0501E, 55109C0510E, 55109C0530E, 55109C0535E,
 55109C0555E, 55109C0560E, 55109C0580E, and 55109C0585E

- b. Maps and revisions are on file in the office of the Zoning Administrator. If more than one map or revision is referenced, the most restrictive information shall apply.
- c. All Letters of Map Amendment or Revisions (LOMAs, LOMRs) approved by FEMA within St. Croix County, Wisconsin.

2. OFFICIAL MAPS BASED ON OTHER STUDIES

- a. Dam Hazard Assessment, Glen Hills Structure 1, Ayers Associates, January 1999. Effective map and profile is the hydraulic shadow for the 100-year event with dam failure.
- b. Dam Hazard Assessment, Glen Hills Structure 2, Ayers Associates, January 1999. Effective map and profile is the hydraulic shadow for the 100-year event with dam failure.
- c. Dam Hazard Assessment, Glen Hills Structure 3, Ayers Associates, January 1999. Effective map and profile is the hydraulic shadow for the 100-year event with dam failure.
- d. Dam Hazard Assessment, Glen Hills Structure 7, Ayers Associates, March 1999. Effective map and profile is the hydraulic shadow for the 100-year event with dam failure.
- e. Dam Hazard Assessment, Glen Hills Structure 8, Ayers Associates, March 1999. Effective map and profile is the hydraulic shadow for the 100-year event with dam failure.

- f. Dam Hazard Assessment, Glen Hills Structure 11, Ayers Associates, January 1999. Effective map and profile is the hydraulic shadow for the 100-year event with dam failure.
- g. Emergency Action Plan, Glen Hills Structure 4, Mead & Hunt, Inc., July 1990. Effective map and profile is the hydraulic shadow for the 100-year event with dam failure.
- h. Flood Plain Management Study, Glenwood City, Village of Downing, Village of Boyceville, Dunn & St. Croix Counties, Wisconsin, USDA Soil Conservation Service in Cooperation with Dunn County, Wisconsin and St. Croix County, Wisconsin, April 1984. Effective profiles include Glen Hills Structures 5, 6 and 10 in place with no failure.
- i. Type 10 Flood Insurance Study (FIS), Owen Ayers and Associates, Inc., January 1973.
- j. Letter of map Revision, Case No. 15-05-3808P. Revision to Map Panel 55109C0420E. Effective April 1, 2016. Effective map amends the floodplain boundary within parts of the Towns of Eau Galle and Cady.

C. ESTABLISHMENT OF DISTRICTS

1. GENERAL FLOODPLAIN DISTRICT (GFP)

- a. Those areas that have been or may be covered by floodwater during the regional flood and do not have a delineated Floodway or Floodfringe.

2. FLOODWAY DISTRICT (FW)

- a. That portion of the Floodplain District that includes the channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the regional floodwaters.

3. FLOODFRINGE DISTRICT (FF)

- a. That portion of the Floodplain District between the limits of the regional flood and the limits of the floodway.

4. DISTRICT BOUNDARIES

- a. The boundaries of all floodplain districts are designated as floodplains or A Zones on the maps listed in §17.40 B. above. Any change to the base flood elevations (BFE) in the Flood Insurance Study (FIS) or on the Flood Insurance Rate Map (FIRM) must be reviewed and approved by the Wisconsin Department of Natural Resources (WI DNR) and FEMA before it is effective.
- b. Maps and revisions are on file in the office of the Zoning Administrator. If more than one map or revision is referenced, the most restrictive information shall apply.
- c. Discrepancies between boundaries on the official floodplain zoning map and actual field conditions shall be resolved using the criteria in e. or f. below.
- d. The Zoning Administrator can rely on a boundary derived from a profile elevation to grant or deny a land use permit. The Zoning Administrator shall be responsible for documenting actual pre-development field conditions and the basis upon which the district boundary was determined.

- e. If flood profiles exist, the map scale and the profile elevations shall determine the district boundary. The regional or base flood elevations shall govern if there are any discrepancies.
- f. Where flood profiles do not exist, the location of the boundary shall be determined consistent with §17.40 E.3., General Floodplain District.

D. STANDARDS APPLICABLE TO ALL FLOODPLAIN DISTRICTS

1. HYDRAULIC STANDARDS

- a. Except as allowed in b. below, no floodplain development shall:
 - 1) Obstruct flow, defined as development which blocks the conveyance of floodwaters by itself or with other development, increasing regional flood height which equals or exceeds 0.01 foot; or
 - 2) Increase regional flood height due to floodplain storage area lost, which equals or exceeds 0.01 foot.
- b. Applicants shall provide the following data to determine the effects of the proposal:
 - 1) A cross-section elevation view of the proposal, perpendicular to the watercourse, showing if the proposed development will obstruct flow; or
 - 2) An analysis calculating the effects of this proposal on regional flood height.
- c. The Zoning Administrator shall deny permits if it is determined the proposed development will obstruct flow or increase regional flood heights 0.01 foot or more, based on the officially adopted Flood Insurance Rate Map, other adopted map, information submitted by the applicant consistent with §17.40 E.3., or unless allowed by d. below.
- d. Obstructions or increases equal to or greater than 0.01 foot may only be permitted if amendments are made to this ordinance, the official floodplain zoning maps, floodway lines and water surface profiles, in accordance with §17.40 I.8.

2. NEW CONSTRUCTION AND LAND DIVISION

- a. The Zoning Administrator shall review all land use permits and land division applications to determine whether proposed building sites will be reasonably safe from flooding.
- b. Except where allowed by this ordinance, the lowest floor of all new construction and substantial improvements shall be located on fill to an elevation of 2 feet above the regional flood elevation.
- c. Any structures to be constructed at or below the regional flood elevation must:
 - 1) Be designed or modified, and adequately anchored, to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads.
 - 2) Be constructed with materials resistant to flood damage.
 - 3) Be constructed by methods and practices that minimize flood damages.
 - 4) Be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- d. All proposed land divisions and manufactured or mobile home parks shall include regional flood elevation and floodway data.

3. WATERCOURSE ALTERATIONS

- a. No permit to alter or relocate a watercourse in a mapped floodplain shall be issued until the Zoning Administrator has notified in writing all adjacent municipalities, WI DNR and the FEMA regional office.
- b. The alteration or relocation of a watercourse on an official mapped floodplain area is prohibited unless the applicant has received all permits and approvals from the Zoning Administrator, WI DNR, FEMA and all other applicable local, state or federal authorities.
- c. The flood carrying capacity of any altered or relocated watercourse shall be maintained.
- d. The Zoning Administrator may determine that the applicant must obtain conditional approval from FEMA (CLOMA, CLOMR) prior to approving a watercourse relocation or alteration.
- e. As soon as is practicable, but not later than six months after the date of a watercourse alteration or relocation, the applicant shall submit to the Zoning Administrator and FEMA appropriate technical or scientific data in accordance with National Flood Insurance Program guidelines that shall be used to revise the flood insurance rate map, risk premium rates and floodplain management regulations as required.

4. WISCONSIN STATUTES, CHAPTER 30, 31, DEVELOPMENT

- a. Development which requires a permit from the WI DNR, under Wisconsin Statutes 30 and 31, such as docks, piers, wharves, bridges, culverts, dams and navigational aids, may be allowed if the necessary permits are obtained and amendments to the floodway lines, water surface profiles, base flood elevations established in the Flood Insurance Study, or other data from the officially adopted flood insurance rate map, or other floodplain zoning maps or the floodplain zoning ordinance are made.

5. FLOODPROOFING

- a. No permit or variance shall be issued until the applicant submits a plan certified by a registered professional engineer or architect that the floodproofing measures will protect the structure or development to the flood protection elevation.
- b. Floodproofing measures shall meet or exceed the applicable FEMA Technical Bulletin standards.
- c. Floodproofing measures shall be designed to:
 - 1) Withstand flood pressures, depths, velocities, uplift and impact forces and other regional flood factors.
 - 2) Protect structures to the flood protection elevation.
 - 3) Anchor structures to foundations to resist flotation and lateral movement.
 - 4) Insure that structural walls and floors are watertight to the flood protection elevation, and the interior remains completely dry during flooding without human intervention.
- d. Floodproofing measures could include:
 - 1) Reinforcing walls and floors to resist rupture or collapse caused by water pressure or floating debris.
 - 2) Adding mass or weight to prevent flotation.
 - 3) Placing essential utilities above the flood protection elevation.
 - 4) Installing surface or subsurface drainage systems to relieve foundation wall and basement floor pressures.

- 5) Constructing water supply wells and waste treatment systems to prevent the entry of flood waters.
- 6) Putting cutoff valves on sewer lines or eliminating gravity flow basement drains.

E. GENERAL FLOODPLAIN DISTRICT (GFP)

1. APPLICABILITY

- a. The provisions for this district shall apply to all floodplains for which flood profiles are not available or where flood profiles are available but floodways have not been delineated. Floodway and floodfringe districts shall be delineated as required in this section.

2. PERMITTED USES AND DEVELOPMENT STANDARDS

- a. Pursuant to §17.40 E.3., it shall be determined whether the proposed use is located within a floodway or floodfringe area.
- b. Those uses permitted in floodway (§17.40 F.2.) and floodfringe areas (§17.40 G.2.) are allowed within the general floodplain district, according to the standards of §17.40 F.3. (floodway) and §17.40 G.3. (floodfringe), provided that all permits or certificates required under §17.40 I. have been issued.

3. DETERMINING RFE, FW AND FF LIMITS

- a. Applicant shall submit information prepared by a registered professional engineer adequate to determine the regional flood elevation, the effects of the proposed development on flood elevations and velocities, and the limits of the floodway and floodfringe.
 - 1) Information shall include but is not limited to:
 - a) Two copies of an aerial photograph or a plan which shows the proposed development with respect to the general floodplain district limits, stream channel, and existing floodplain developments.
 - b) A legal description of the property.
 - c) A typical valley cross-section showing the stream channel, the floodplain adjoining each side of the channel, the cross-sectional area to be occupied by the proposed development, and all historic high water information.
 - d) Plans (surface view) showing all existing and proposed elevations or contours of the ground; the location, size and lowest floor elevation of all proposed and existing structures on the site; the location and elevations of streets, water supply, and sanitary facilities; soil types and other information deemed pertinent by the Zoning Administrator.
 - e) Profile showing the slope of the bottom of the channel or flow line of the stream.
 - f) Specifications for building construction and materials, floodproofing, filling, dredging, channel improvement, storage, water supply and sanitary facilities.
 - g) Where the provisions of §17.40 I.2.a.4) apply, the applicant shall provide all required information and computations to delineate floodway boundaries and the effects of the project on flood elevations.
- b. The Zoning Administrator may submit a copy of the information described in a. and b. above to the WI DNR regional office along with a written request for technical assistance to establish or confirm the regional flood elevations and floodway data.

F. FLOODWAY DISTRICT (FW)

1. APPLICABILITY

- a. This section applies to all floodway areas identified on the floodplain zoning maps and those identified pursuant to §17.40 E.3.

2. PERMITTED USES

- a. The following open space uses are allowed in the floodway district and the floodway areas of the general floodplain district, if they are not prohibited by any other ordinance, they meet the standards in §§17.40 F.3. and 17.40 F.4. and all permits have been issued according to §17.40 F.3.d.
 - 1) Agricultural uses, such as: farming, outdoor plant nurseries, horticulture, viticulture and wild crop harvesting.
 - 2) Nonstructural industrial and commercial uses, such as loading areas, parking areas and airport landing strips.
 - 3) Nonstructural recreational uses, such as golf courses, archery ranges, picnic grounds, boat ramps, swimming beach, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting, trap and skeet activities, hunting and fishing areas and hiking and horseback riding trails, subject to the fill limitations of §17.40 F.3.d.
 - 4) Extraction of sand, gravel or other materials that comply with §17.40 F.3.d.
 - 5) Functionally water-dependent uses, such as docks, piers or wharves, dams, flowage areas, culverts, navigational aids and river crossings of transmission lines, and pipelines that comply with Wisconsin Statute Chapters 30 and 31.
 - 6) Public utilities, streets and bridges that comply with §17.40 F.3.c.
 - 7) Public or Private Campgrounds

3. STANDARDS FOR DEVELOPMENT

- a. Any development in the floodway shall comply with §17.40 D. and have a low flood damage potential
- b. Structures accessory to permanent open space uses and structures classified as historic are allowed by a land use permit if the following standards are met:
 - 1) The structure is not designed for human habitation.
 - 2) The structure is anchored to resist flotation, collapse, and lateral movement.
 - 3) Portions of the structure located below the Flood Protection Elevation must be constructed of flood resistant materials.
 - 4) The structure must be designed to allow for the automatic entry of flood waters.
 - 5) Mechanical and utility equipment must be elevated or flood proofed at or above the Flood Protection Elevation consistent with §17.40 D.5.
 - 6) The structure must not obstruct flow of flood waters or cause any increase in flood levels during the occurrence of the Regional Flood.
 - 7) Use of the structure must be limited to parking and/or limited storage.
- c. Public utilities, streets and bridges are allowed by a land use permit if floodproofing measures are provided to the flood protection elevation.
- d. Fills or deposition of materials are allowed by a land use permit if the following standards are met:

- 1) No material is deposited in the navigable channel unless a permit is issued by the WI DNR pursuant to Wisconsin Statute Chapter 30, and a permit pursuant to §404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1344 has been issued, if applicable, and the other requirements of this section are met.
 - 2) The fill or other materials will be protected against erosion by riprap, vegetative cover, sheet piling or bulkheading.
 - 3) The fill is not classified as a solid or hazardous waste material.
- e. Public or private campgrounds are allowed by a land use permit if the following standards are met:
- 1) The campground is approved by the WI Department of Health and Family Services.
 - 2) The character of the river system and the elevation of the campground are such that a 72-hour warning of an impending flood can be given to all campground occupants.
 - 3) There is an adequate flood warning procedure for the campground that offers the minimum notice required under this section to all persons in the campground. This procedure shall include a written agreement between the campground owner, the municipal emergency government coordinator and the chief law enforcement official which specifies the flood elevation at which evacuation shall occur, personnel responsible for monitoring flood elevations, types of warning systems to be used and the procedures for notifying at-risk parties, and the methods and personnel responsible for conducting the evacuation.
 - 4) This agreement shall be for no more than one calendar year, at which time the agreement shall be reviewed and updated - by the officials identified in d) above - to remain in compliance with all applicable regulations, including those of the WI Department of Health and Family Services and all other applicable regulations.
 - 5) Only camping units are allowed.
 - 6) The camping units may not occupy any site in the campground for more than 180 consecutive days, at which time the camping unit must be removed from the floodplain for a minimum of 24 hours.
 - 7) All camping units that remain on site for more than 30 days shall be issued a limited authorization by the campground operator, a written copy of which is kept on file at the campground. Such authorization shall allow placement of a camping unit for a period not to exceed 180 days and shall ensure compliance with all the provisions of this section.
 - 8) The municipality shall monitor the limited authorizations issued by the campground operator to assure compliance with the terms of this section.
 - 9) All camping units that remain in place for more than 180 consecutive days must meet the applicable requirements in §§17.40 F. or G. for the district in which the structure is located.
 - 10) The campground shall have signs clearly posted at all entrances warning of the flood hazard and the procedures for evacuation when a flood warning is issued.
 - 11) All service facilities, including but not limited to refuse collection, electrical service, natural gas lines, propane tanks, wastewater treatment systems and wells shall be properly anchored and placed at or floodproofed to the flood protection elevation.

4. PROHIBITED USES

- a. All uses not listed as permitted uses in §17.40 F.2. are prohibited, including the following uses:
 - 1) Habitable structures, structures with high flood damage potential, or those not associated with permanent open-space uses.
 - 2) Storing materials that are buoyant, flammable, explosive, injurious to property, water quality, or human, animal, plant, fish or other aquatic life.
 - 3) Uses not in harmony with or detrimental to uses permitted in the adjoining districts.
 - 4) Any private or public wastewater treatment systems, except portable latrines that are removed prior to flooding and systems associated with recreational areas and WI DNR approved campgrounds that meet the applicable provisions of Chapter 17 and Wisconsin Department of Commerce Administrative Code Comm 83.
 - 5) Any public or private wells that are used to obtain potable water except those for recreational areas that meet the requirements of WI DNR Administrative Code Chapters NR 811 and NR 812.
 - 6) Any solid or hazardous waste disposal sites.
 - 7) Any wastewater treatment ponds or facilities, except those permitted under §NR 110.15(3)(b).
 - 8) Any sanitary sewer or water supply lines, except those to service existing or proposed development located outside the floodway, which complies with the regulations for the floodplain area occupied by the development.

G. FLOODFRINGE DISTRICT (FF)**1. APPLICABILITY**

- a. This section applies to all floodfringe areas shown on the floodplain zoning maps and those identified pursuant to §17.40 E.3.

2. PERMITTED USES

- a. Any structure, land use, or development is allowed in the floodfringe district with a land use permit if the standards in §17.40 G.3. are met, the use is not prohibited by this subchapter or any other ordinance or regulation and all permits or certificates specified in §17.40 I. have been issued.
- b. All permitted uses in the floodway district (§17.40 F.3.) are allowed with a land use permit in the floodfringe district.

3. STANDARDS FOR DEVELOPMENT

- a. All of the provisions of §17.40 D.1. shall apply. In addition, the following requirements shall apply according to the use requested.
- b. Any habitable structure, including a manufactured or mobile home, which is to be erected, constructed, reconstructed, altered, or moved into the floodfringe area for residential use, shall meet or exceed the following standards:

- 1) The elevation of the lowest floor, excluding the basement or crawlway, shall be 2 feet or more above the regional flood elevation on fill. The fill shall be one foot or more above the regional flood elevation extending at least 15 feet beyond the limits of the structure. Other floodproofing measures may be approved if the elevations of existing streets or sewer lines makes compliance impractical and the Board of Adjustment grants a variance consistent with flood proofing standards in §17.40 D.5.
- 2) The basement or crawlway floor may be placed at the base flood elevation if it is floodproofed to the 2 feet above the regional flood elevation. No basement or crawlway floor is allowed below the regional flood elevation;
- 3) Contiguous dryland access shall be provided from a structure to land outside of the floodplain, except as provided in 4) below.
- 4) In developments where existing street or sewer line elevations make compliance with 3) above impractical, the municipality may permit new development and substantial improvements where access roads are at or below the regional flood elevation, if:
 - a) The municipality has written assurance from police, fire and emergency services that rescue and relief will be provided to the structure(s) by wheeled vehicles during a regional flood event; or
 - b) The municipality has a natural disaster plan approved by Wisconsin Emergency Management and the WI DNR.
- c. An accessory structure not connected to a principal structure may be constructed with its lowest floor at or above the Regional Flood Elevation. An accessory structure which is not connected to the principal structure and which is less than 600 square feet in size and valued at less than \$10,000 may be constructed with its lowest floor no more than two feet below the Regional Flood Elevation provided that it is subject to flood velocities of no more than two feet per second and that it meets all of the provisions of §17.40 F.3.b. and §17.40 G.3.f.
- d. Any commercial structure which is erected, altered or moved into the floodfringe area shall meet the requirements of §17.40 G.3.b. Subject to the requirements of f. below, storage yards, surface parking lots and other such uses may be placed at lower elevations if an adequate warning system exists to protect life and property.
- e. Any manufacturing or industrial structure which is erected, altered or moved into the floodfringe area shall be protected to the flood protection elevation using fill, levees, floodwalls, or other flood proofing measures in §17.40 D.5. Subject to the requirements of f. below, storage yards, surface parking lots and other such uses may be placed at lower elevations if an adequate warning system exists to protect life and property.
- f. Materials that are buoyant, flammable, explosive, or injurious to property, water quality or human, animal, plant, fish or aquatic life shall be stored at or above the flood protection elevation or floodproofed in compliance with §17.40 D.5. Adequate measures shall be taken to ensure that such materials will not enter the water body during flooding.
- g. All utilities, streets and bridges shall be designed to be compatible with comprehensive floodplain development plans and meet the following standards:

- 1) When failure of public utilities, streets and bridges would endanger public health or safety, or where such facilities are deemed essential, construction of and substantial improvements to such facilities may only be permitted if they are floodproofed in compliance with §17.40 D.5. to the flood protection elevation.
 - 2) Minor roads or nonessential utilities may be constructed at lower elevations if they are designed to withstand flood forces to the regional flood elevation.
 - h. All on- wastewater treatment disposal systems shall be floodproofed, pursuant to §17.40 D.5., to the flood protection elevation and shall meet the provisions of all local ordinances and Comm 83.
 - i. All wells shall be floodproofed, pursuant to §17.40 D.5., to the flood protection elevation and shall meet the provisions of NR 811 and NR 812.
 - j. Any deposited material must meet all the provisions of this subchapter.
 - k. Manufactured or mobile homes are allowed if the following standards are met:
 - 1) Owners or operators of manufactured or mobile home parks and subdivisions shall provide adequate surface drainage to minimize flood damage.
 - 2) Owners or operators of manufactured or mobile home parks shall submit an evacuation plan indicating vehicular access and escape routes.
 - 3) In existing manufactured or mobile home parks, all new homes, replacement homes on existing pads, and substantially improved homes shall:
 - a) Have the lowest floor elevated to the flood protection elevation; and
 - b) Be anchored so they do not float, collapse or move laterally during a flood.
 - 4) Outside of existing manufactured or mobile home parks, including new manufactured or mobile home parks and all single units outside of existing parks, all new, replacement and substantially improved manufactured or mobile homes shall meet the residential development standards for the floodfringe in §17.40 G.3.b.
 - l. Mobile recreational vehicles on the site for fewer than 180 consecutive days or more are allowed if the following standards are met
 - 1) Be fully licensed and ready for highway use, or
 - 2) Meet the requirements in §17.40 G.3.k.3) and 17.40 G.3.k.4) for new construction, including anchoring and elevation requirements for manufactured or mobile homes.
 - 3) A mobile recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect utilities and security devices and has no permanently attached additions.
 - m. All public or private campgrounds shall meet the standards in §17.40 F.3.e.
 - 1) All camping units that remain in place for more than 180 consecutive days must meet the applicable requirements in §17.40 G.3.b.
- 4. PROHIBITED USES**
- a. All uses not listed as permitted uses in §17.40 G.2. are prohibited, including disposal of solid or hazardous waste is prohibited in floodfringe areas.

H. NONCONFORMING USES AND STRUCTURES

1. GENERAL STANDARDS

- a. These standards shall apply to all modifications or additions to any nonconforming use or structure and to the use of any structure or premises which was lawful before the passage of this subchapter or any amendment thereto.
- b. The existing lawful use of a structure or its accessory use which is not in conformity with the provisions of this subchapter may continue subject to the following conditions:
 - 1) No modifications or additions to a nonconforming use or structure shall be permitted unless they comply with this subchapter.
 - 2) The construction of a deck that does not exceed 200 square feet and that is adjacent to the exterior wall of a principal structure is not an extension, modification or addition. The roof of the structure may extend over a portion of the deck in order to provide safe ingress and egress to the principal structure.
 - 3) If a nonconforming use or the use of a nonconforming structure is discontinued for 12 consecutive months, it is no longer permitted and any future use of the property, and any structure or building thereon, shall conform to the applicable requirements of this ordinance.
 - 4) The County shall keep a record of all nonconforming uses and nonconforming structures that have been permitted, reviewed or approved. The record shall identify present equalized assessed value, the cost of all modifications or additions which have been permitted, and the percentage of the structure's total current value those modifications represent.
 - 5) All additions to nonconforming structures must be elevated on fill to the flood protection elevation, consistent with §§17.40 F. and G., or where allowed, floodproofed consistent with §17.40 D.5.
 - 6) No modification or addition to any nonconforming structure or any structure with a nonconforming use, which over the life of the structure would equal or exceed 50% of its present equalized assessed value, shall be allowed unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this ordinance to include:
 - a) Contiguous dry land access must be provided for residential and commercial uses in compliance with §17.40 G.3.b.3).
 - b) The costs of elevating a nonconforming building or a building with a nonconforming use to the flood protection elevation are excluded from the 50% provisions this paragraph.
 - 7) Except as provided in 8) below, if any nonconforming structure or any structure with a nonconforming use is destroyed or is substantially damaged, it cannot be replaced, reconstructed or rebuilt unless the use and the structure meet the requirements of this subchapter. A structure is considered substantially damaged if the total cost to restore the structure to its pre-damaged condition equals or exceeds 50% of the structures present equalized assessed value.

- 8) For nonconforming structure that are damaged or destroyed by a nonflood disaster, repair or reconstruction of any such nonconforming structure may be permitted in order to restore it after the nonflood disaster, provided that the nonconforming structure will meet all of the minimum requirements under applicable FEMA regulations (44CFR Part 60), or the regulations promulgated thereunder, also including, but not limited to:
 - a) No permit or variance shall be issued until the applicant submits a plan certified by a registered professional engineer or architect that the floodproofing measures will protect the structure or development to the regional flood elevation.
 - b) Floodproofing measures shall meet or exceed the applicable FEMA Technical Bulletin standards.
 - c) Flood-resistant materials must be used.
 - d) Floodproofing measures shall be designed to:
 - i. Withstand flood pressures, depths, velocities, uplift and impact forces and other regional flood factors.
 - ii. Protect structures to the regional flood elevation.
 - iii. Anchor structures to foundations to resist flotation and lateral movement.
 - iv. Insure that structural walls and floors are watertight to the regional flood elevation, and the interior remains completely dry during flooding without human intervention.
 - e) Floodproofing measures could include:
 - i. Reinforcing walls and floors to resist rupture or collapse caused by water pressure or floating debris.
 - ii. Adding mass or weight to prevent flotation.
 - iii. Placing essential utilities above the regional flood elevation.
 - iv. Installing surface or subsurface drainage systems to relieve foundation wall and basement floor pressures.
 - v. Constructing water supply wells and waste treatment systems to prevent the entry of flood waters.
 - vi. Putting cutoff valves on sewer lines or eliminating gravity flow basement drains.
- 9) A nonconforming historic structure may be altered if the alteration will not preclude the structure's continued designation as a historic structure, the alteration will comply with §17.40 F.3.a. and 17.40 F.3.b., flood resistant materials are used, and construction practices and floodproofing methods that comply with §17.40 D.5. are used.

2. FLOODWAY

- a. No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use in the floodway, unless such modification or addition:
 - 1) Has been granted a land use permit or variance.
 - 2) Meets the requirements of §17.40 H.1.
 - 3) Will not increase the obstruction to flood flows or regional flood height.
 - 4) Any addition to the existing structure shall be floodproofed consistent with §17.40 D.5. to the flood protection elevation.

- b. No new on-site wastewater treatment disposal system, or addition to an existing on-site wastewater treatment disposal system, shall be allowed in the floodway except where an addition has been ordered by a government agency to correct a hazard to public health. Any replacement, repair or maintenance of an existing on-site wastewater treatment system in the floodway shall meet the applicable requirements Chapter 12 St. Croix County Sanitary Ordinance and Comm 83.
- c. No new well or modification to an existing well used to obtain potable water shall be allowed in the floodway. Any replacement, repair or maintenance of an existing well in a floodway area shall meet the applicable requirements of all municipal ordinances and NR 811 and NR 812.

3. FLOODFRINGE

- a. No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use unless the modification or addition is elevated on fill in compliance with the applicable standards in §17.40 G.
- b. All new private wastewater treatment systems, or addition to, replacement, repair or maintenance of a private wastewater treatment system shall meet all the applicable provisions of Chapter 12 St. Croix County Sanitary Ordinance and Comm 83.
- c. All new wells, or addition to, replacement, repair or maintenance of a well shall meet the applicable provisions of this subchapter and NR 811 and NR 812.

I. ADMINISTRATION

1. ZONING ADMINISTRATOR

- a. The zoning administrator is authorized to administer this subchapter and shall have the following duties and powers:
 - 1) Advise applicants of the ordinance provisions, assist in preparing permit applications and appeals, and assure that the regional flood elevation for the proposed development is shown on all permit applications.
 - 2) Issue land use permits and inspect properties for compliance with provisions of this subchapter, and issue certificates of compliance where appropriate.
 - 3) Inspect all damaged floodplain structures and perform a substantial damage assessment to determine if substantial damage to the structures has occurred.
 - 4) Keep records of all official actions such as:
 - a) All permits issued, inspections made, and work approved.
 - b) Documentation of certified lowest floor and regional flood elevations for floodplain development.
 - c) Records of water surface profiles, floodplain zoning maps and ordinances, nonconforming uses and structures including changes, appeals, variances and amendments.
 - d) All substantial damage assessment reports for floodplain structures.
 - 5) Submit copies of the following items to the WI DNR regional office:
 - a) Within 10 days of the decision, a copy of any decisions on variances, appeals for map or text interpretations, and map or text amendments.
 - b) Copies of any case-by-case analyses, and any other information required by the WI DNR including an annual summary of the number and types of floodplain zoning actions taken.

- c) Copies of substantial damage assessments performed and all related correspondence concerning the assessments.
- 6) Investigate violations of and enforce the provisions of this subchapter.
- 7) Submit copies of text and map amendments and biennial reports to the FEMA Regional office.

2. LAND USE PERMIT

- a. A land use permit shall be obtained before any new development or any repair or change in the use of a building or structure, including sewer and water facilities, may be initiated. Application to the zoning administrator shall include:
 - 1) Name and address of the applicant, property owner and contractor.
 - 2) Legal description, proposed use, and whether it is new construction or a modification.
 - 3) A site plan drawn to scale shall be submitted with the permit application form and shall contain:
 - a) Location, dimensions, area and elevation of the lot.
 - b) Location of the ordinary highwater mark of any abutting navigable waterways.
 - c) Location of any structures with distances measured from the lot lines and street centerlines.
 - d) Location of any existing or proposed on-site wastewater treatment systems or private water supply systems.
 - e) Location and elevation of existing or future access roads.
 - f) Location of floodplain and floodway limits as determined from the official floodplain zoning maps.
 - g) The elevation of the lowest floor of proposed buildings and any fill using North American Vertical Datum (NAVD).
 - h) Data sufficient to determine the regional flood elevation in NAVD at the location of the development and to determine whether or not the requirements of §§17.40 F. or G. are met.
 - i) Data to determine if the proposed development will cause an obstruction to flow or an increase in regional flood height or discharge according to §17.40 D.1. This may include any of the information noted in §17.40 F.3.
 - j) A FEMA NFIP Elevation Certificate (FEMA Form 81-31) based on construction drawings.
 - 4) The applicant shall provide all survey data and computations required to show the effects of the project on flood heights, velocities and floodplain storage, for all subdivision proposals, as "subdivision" is defined in Wisconsin Statute Chapter 236, and other proposed developments exceeding 5 acres in area or where the estimated cost exceeds \$125,000. The applicant shall provide:
 - a) An analysis of the effect of the development on the regional flood profile, velocity of flow and floodplain storage capacity;
 - b) A map showing location and details of vehicular access to lands outside the floodplain; and
 - c) A surface drainage plan showing how flood damage will be minimized.
 - d) The estimated cost of the proposal shall include all structural development, landscaping, access and road development, utilities, and other pertinent items, but need not include land costs.

3. CERTIFICATE OF COMPLIANCE

- a. If a land use permit is required, no land shall be occupied or used, and no building which is hereafter constructed, altered, added to, modified, repaired, rebuilt or replaced shall be occupied until a certificate of compliance is issued by the Zoning Administrator, subject to the following provisions:
 - 1) When construction is complete, the certificate of compliance shall show that the building or premises or part thereof, and the proposed use, conform to the provisions of this subchapter.
 - 2) The applicant shall submit a certification signed by a registered professional engineer or registered land surveyor that the fill, lowest floor and floodproofing elevations are in compliance with the permit issued. A FEMA NFIP Elevation Certificate (FEMA Form 81-31) based on finished construction shall also be submitted.
 - 3) Floodproofing measures also require certification by a registered professional engineer or registered architect that floodproofing measures meet the requirements of §17.40 D.5.
- b. If all ordinance provisions are met, the certificate of compliance shall be issued within 10 days after written notification that the permitted work is completed.

4. OTHER PERMITS

- a. The applicant must secure all necessary permits from federal, state, and local agencies, including those required by the U.S. Army Corps of Engineers under §404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1344.

5. PUBLIC INFORMATION

- a. Place marks on structures to show the depth of inundation during the regional flood.
- b. All maps, engineering data and regulations shall be available and widely distributed.
- c. All real estate transfers should show what floodplain zoning district any real property is in.

6. VARIANCES

- a. The St. Croix County Board of Adjustment may, upon appeal, grant a variance from the standards of this ordinance if the following criteria are met:
 - 1) Literal enforcement of the ordinance provisions will cause unnecessary hardship.
 - 2) The hardship is due to adoption of the floodplain ordinance and unique property conditions, not common to adjacent lots or premises. In such case the ordinance or map must be amended.
 - 3) The variance is not contrary to the public interest.
 - 4) The variance is consistent with the purpose of this ordinance in §17.40 A.5.
- b. In addition to the criteria in a. above, to qualify for a variance under FEMA regulations, the following criteria must be met:
 - 1) The variance may not cause any increase in the regional flood elevation (RFE).
 - 2) Variances can only be granted for lots that are less than one-half acre and are contiguous to existing structures constructed below the RFE.
 - 3) Variances shall only be granted upon a showing of good and sufficient cause, shall be the minimum relief necessary, shall not cause increased risks to public safety or nuisances, shall not increase costs for rescue and relief efforts and shall not be contrary to the purpose of the ordinance.

- c. When a floodplain variance is granted the Board of Adjustment shall notify the applicant in writing that it may result in increased flood insurance premiums and risks to life and property. A copy shall be maintained with the variance record.
- d. Variances to Nonconforming Structures in the Floodfringe
 - 1) Where elevating on fill or floodproofing to the flood protection elevation would result in unnecessary hardship and only where the structure will not be used for human habitation or be associated with a high flood damage potential, the Board of Adjustment may grant a variance for modifications or additions, which are protected to elevations lower than the flood protection elevation if the following standards are met:
 - a) No floor is allowed below the regional flood elevation for residential or commercial structures;
 - b) Human lives are not endangered;
 - c) Public facilities, such as water or sewer, will not be installed;
 - d) Flood depths will not exceed two feet;
 - e) Flood velocities will not exceed two feet per second; and
 - f) The structure will not be used for storage of materials as described in §17.40 G.3.f.
 - 2) If the provisions of 1) above cannot be met, one addition to an existing room in a nonconforming building or a building with a nonconforming use may be allowed in the floodfringe, if the addition:
 - a) Meets all other regulations and will be granted by permit or variance;
 - b) Does not exceed 60 square feet in area; and
 - c) In combination with other previous modifications or additions to the building, does not exceed 50% of the present equalized assessed value of the building.

7. EXPIRATION

- a. Activities authorized by a permit or variance issued under this subchapter shall commence within one year from the date of approval and be substantially completed or implemented within two years, after which time the permit or variance expires.
- b. Prior to expiration of a permit or variance, applicants can request extensions of up to six months from the Zoning Administrator.
- c. The total time granted for extensions shall not exceed one year.

8. AMENDMENTS, MAP AMENDMENTS & REMOVAL OF LAND FROM THE FLOODPLAIN

- a. Actions which may require an amendment include, but are not limited to, the following:
 - 1) Any change to the official floodplain zoning map, including the floodway line or boundary of any floodplain area.
 - 2) Correction of discrepancies between the water surface profiles and floodplain zoning maps.
 - 3) Any fill in the floodplain that raises the elevation of the filled area to a height at or above the flood protection elevation and is contiguous to land lying outside the floodplain.
 - 4) Any fill or floodplain encroachment that obstructs flow, increasing regional flood height 0.01 foot or more. Flood easements or other appropriate legal arrangements must be secured from all adversely affected property owners prior to approval by the County.

- 5) Any upgrade to a floodplain ordinance text required by s.NR 116.05, Wis. Adm. Code, or otherwise required by law, or for changes by the County.
 - 6) All channel relocations and changes to the maps to alter floodway lines or to remove an area from the floodway or the floodfringe that is based on a base flood elevation from a FIRM requires prior approval by FEMA.
- b. All map amendments and removal of lands from the floodplain require prior approval from FEMA and WI DNR.
 - c. Compliance with the provisions of this subchapter shall not be grounds for removing land from the floodplain unless it is filled at least two feet above the regional or base flood elevation, the fill is contiguous to land outside the floodplain, and the map is amended pursuant to §17.72 of this Chapter.
 - d. This procedure does not remove the FEMA requirements for the mandatory purchase of flood insurance.
 - e. All channel relocations and changes to the maps to alter floodway lines or to remove an area from the floodway or the floodfringe that is based on a base flood elevation from a FIRM requires prior approval by FEMA.
 - f. Amendments to this subchapter may be made upon petition of any interested party according to the provisions of Wisconsin Statutes §59.69. Such petitions shall include all necessary data required by §§17.40 E.3. and 17.40 I.2.
 - 1) The proposed amendment shall be referred to the zoning agency for a public hearing and recommendation to the governing body. The amendment and notice of public hearing shall be submitted to the WI DNR regional office for review prior to the hearing. The amendment procedure shall comply with the provisions of Wisconsin Statutes §62.23, for cities and villages or Wisconsin Statutes §59.69, for counties.
 - 2) No amendments shall become effective until reviewed and approved by the WI DNR.
 - 3) All persons petitioning for a map amendment that obstructs flow, increasing regional flood height 0.01 foot or more, shall obtain flooding easements or other appropriate legal arrangements from all adversely affected property owners and notify local units of government before the amendment can be approved by the governing body.
 - 4) For amendments in areas with no water surface profiles, the St. Croix County Board of Supervisors shall consider data submitted by the WI DNR, the Zoning Administrator's visual on-site inspections and other available information.